

## REMARKS

Claims 1 – 9 are pending in this application following this amendment. Drawings with proposed correction in red are enclosed with this Amendment After Final for the Examiner's approval. If the revised drawings are satisfactory, Applicant will order and file replacement formal drawings.

Restriction was required in the parent application to the set of claims that Applicant refilled here. The PTO is estopped to require further restriction. Please reconsider and withdraw the restriction requirement.

Applicant respectfully traverses the rejection of claims 1, 4, and 7 - 9 as anticipated under § 102(b) in view of U.S. Patent 6,040,563 (*Matsen*). *Matsen* describes a bonded assembly. The Examiner asserts that *Matsen* teaches a polyimide film adhesive at column 10. *Matsen* reads:

The present invention [i.e., bonded thermoplastic resin composites as shown in Fig. 4 of US 6,040,563] is applicable to all types of organic matrix composites including both thermosetting and the thermoplastic composites such as epoxies, bismaleimides, polyimides, PEEK, PEK, PEKK, PES, or the like. If the materials have high solvent concentrations or the resins emit volatiles when they cure, we need to "bag" the workpiece to permit egress of these volatiles. Therefore, we prefer using resins with low volatiles that are true thermoplastics, like PEEK.

We can bond metals in a comparable process that we will describe in greater detail in section 4.

### 3. Bonding, (i.e., curing) Thermosetting Resin Composite Honeycomb Panels

Fig. 6 illustrates the bonding of thermoset facesheets 300 and 302 to a honeycomb core 304 using an adhesive film 306 in a cobond operation.

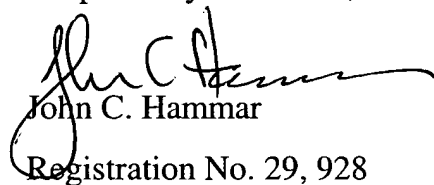
Neither the bonded thermoplastic resin composites nor the resin composite honeycomb panels have the structure defined in the claims and shown in Fig. 4 of the

present application. That structure has adhesive between a superplastically formed core of metal sheets and superplastic face sheets. *Matsen* uses susceptor sheets, but it does not bond metal-to-metal with a high temperature polymer film adhesive. Please reconsider the rejections based upon *Matsen*.

Applicant also respectfully traverses the rejection of claim 6 as obvious under § 103(a) in view of U.S. Patent 6,040,563 (*Matsen*) in view of Applicant's Admitted Prior Art (AAPA). *Matsen* has the deficiencies noted with respect to the 102(b) rejections. There is no AAPA. If there were, such AAPA would not cure the deficiencies of *Matsen*. If the Examiner's reasoning were correct, any combination would be unpatentable for obviousness because it would be merely the assembly of known elements. While the noted alloys exist, there is no teaching to use them in a method of the type Applicant claims, other than Applicant's own teaching. The Applicant's method cannot rightly be rejected over Applicant's own teaching. Since *Matsen* does not teach or suggest a core made from superplastically formed metal sheets, *Matsen* plus the alleged AAPA does not teach the claimed invention.

Entry of the amendment will reduce the issues otherwise facing appeal.

Respectfully submitted,



John C. Hammar

Registration No. 29, 928

Telephone 206-544-1059

Encl.: Drawings